

# **WARWICK SEWER AUTHORITY SLUG DISCHARGE PREVENTION AND CONTROL PLAN**

## **INTRODUCTION**

According to the Code of Federal Regulations 40CFR 403.8(f)(2)(v), Publicly Owned Treatment Works (POTWs) must evaluate, at least once every two years, whether each Significant Industrial User (SIU) needs to submit a Slug Discharge Prevention and Control Plan. By definition, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to, an accidental spill or a non-customary batch discharge. The General Pretreatment regulations also define a slug (discharge) loading as any pollutant discharge violating the specific prohibitions under 40 CFR 403.5 (b). These specific prohibitions include the following list of pollutants:

- (1) pollutants which create a fire or explosion hazard in the POTW;
- (2) pollutants which will cause corrosive structural damage to the POTW;
- (3) solid or viscous pollutants which will cause obstruction in the POTW;
- (4) any pollutant, including oxygen demanding pollutants (COD, BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
- (5) heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW exceeds 40°C (104°F);
- (6) petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through at the POTW;
- (7) pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and/or,
- (8) any trucked or hauled pollutants, except at discharge points designated by the POTW.

The following Slug Discharge Prevention and Control Plan is intended to assist the SIU in evaluating their current practice in prevention and control of slug discharges. Additionally, completion of the attached Plan will allow the Warwick Sewer Authority's (WSA) Industrial Pretreatment Program (IPP) to properly assess the industry's potential to impact the POTW, as well as the industry's ability to prevent and remediate slug discharges.

## SECTION I: GENERAL INFORMATION

**COMPANY NAME:**

**COMPANY ADDRESS:**

**COMPANY CONTACTS:**

**NAME:**

**TITLE:**

**PHONE NUMBER:**

**EMERGENCY NUMBER/PAGER:**

**NAME:**

**TITLE:**

**PHONE NUMBER:**

**EMERGENCY NUMBER/PAGER:**

**TYPE OF BUSINESS:**

**OPERATING SCHEDULE AND NUMBER OF EMPLOYEES:**

	S	M	TU	W	TH	F	S
NUMBER OF EMPLOYEES – FIRST SHIFT							
NUMBER OF EMPLOYEES – SECOND SHIFT							
NUMBER OF EMPLOYEES – THIRD SHIFT							

## SECTION I: GENERAL INFORMATION (CONTINUED)

### DAILY WASTEWATER DISCHARGE FLOW RATES:

TYPE (DESCRIPTION) OF WASTEWATER	VOLUME (GPD)

### COMPANY'S HISTORY REGARDING PREVIOUS SLUG DISCHARGE (include dates where applicable):

## **SECTION II: FACILITY LAYOUT AND FLOW DIAGRAMS**

**PLEASE PROVIDE THE FOLLOWING DIAGRAMS TO SUPPLEMENT YOUR COMPANY'S SLUG DISCHARGE PREVENTION AND CONTROL PLAN:**

- **GENERAL LAYOUT OF THE FACILITY SHOWING (where applicable):**
  - PROPERTY BOUNDARIES
  - ENTRANCE AND EXIT ROUTES
  - MANUFACTURING AREAS
  - HAZARDOUS MATERIALS PROCESS & STORAGE AREAS
  - WASTE HANDLING, STORAGE AND TREATMENT FACILITIES
  - LOADING AND UNLOADING AREAS
  - DRAINAGE DIRECTION
  - FLOOR DRAINS, PIPES, CHANNELS AND DRAINAGE DESTINATIONS
- **FACILITY'S FLOW SHOWING (where applicable):**
  - PIPING AND INSTRUMENTATION
  - FLOW RATES
  - TANKS AND CAPACITIES
  - TREATMENT SYSTEMS
  - FINAL DESTINATIONS OF FLOWS

### **SECTION III: HAZARDOUS MATERIALS DATA (CHART)**

**YOUR COMPANY MUST PROVIDE SUFFICIENT DATA ON ALL MATERIALS OF CONCERN USED AND STORED AT THE FACILITY. THIS INFORMATION IS USEFUL IN DETERMINING THE ORIGIN OF A SLUG, POTENTIAL HAZARDS AND APPROPRIATE SLUG RESPONSE PROCEDURES. DESCRIPTIONS OF THE MATERIALS HANDLED, THE LOCATION OF THESE MATERIALS, DESCRIPTION OF CONTAINMENT, TRANSFER AND TRANSPORT, AS WELL AS ANY ADDITIONAL COMMENTS SHOULD BE PROVIDED AS FOLLOWS:**

- Materials – both chemical and trade names should be listed in the inventory list. This information may help minimize confusion over the constituents of a compound and facilitate proper response procedures to a slug.
- Location of Materials in Plant – knowing the location of the material will assist plant employees and emergency response personnel in locating areas initially affected by a spill.
- Maximum Volume/Container Volume – this information is useful in determining the potential impact of a slug.
- Container Description – the description should include the type of container (e.g., steel drum, fiberglass tank, etc.) and the presence of container attachments (i.e., valves, pumps, transfer pipes, etc.) to assist in determining the potential origin of a slug load.
- Transfer and Transport Areas – the condition of containers and transfer equipment is useful in assessing the potential for accidental spills or slug discharges of high strength wastes and possible effects on the treatment plant.
- Additional Comments – comments may include information on the physical, chemical or toxicological effects of the material and special precautions when handling the material. Information provided may include procedures to prevent contact between incompatible materials. The facility must demonstrate that the following three compatibility aspects have been considered: (1) construction of container; (2) other materials in immediate vicinity; and (3) the surrounding environment.

**PLEASE FEEL FREE TO USE THE CHART SUPPLIED. HOWEVER, YOU MAY CHOOSE TO USE AN EXISTING COMPANY CHART OR SPREAD SHEET PROVIDED THE AFOREMENTIONED CRITERIA ARE ADDRESSED.**

## SECTION IV: SLUG PREVENTION EQUIPMENT AND PROCEDURES

ENSURE THAT APPROPRIATE SLUG PREVENTION EQUIPMENT IS PRESENT AT FOLLOWING LOCATIONS (where applicable)

LOCATION	EQUIPMENT (i.e., berms, sumps, trenches, tanks, etc.)
STORAGE AREA	
LOADING/ UNLOADING	
PROCESS	
TREATMENT	
OTHER	

## **SECTION IV: SLUG PREVENTION EQUIPMENT AND PROCEDURES (CONTINUED)**

**ENSURE THAT INSPECTION AND MAINTENANCE PROCEDURES EXIST INCLUDING THE FOLLOWING (check all that apply)**

- ☐ **INSPECTIONS AND MAINTENANCE OF CONTAINERS AND TANKS**
- ☐ **INSPECTIONS OF STORAGE PROCESS, LOADING AND UNLOADING AREAS**
- ☐ **PROPER LABELING OF MATERIALS/CHEMICALS**
- ☐ **USE OF SECURITY AND SAFETY WARNING SIGNS/ALARMS**
- ☐ **INSPECTIONS AND MAINTENANCE OF SLUG PREVENTION/RESPONSE EQUIPMENT**

**PLEASE PROVIDE A BRIEF SYNOPSES OF THE APPLICABLE INSPECTION AND MAINTENANCE PROCEDURES (i.e., frequency of inspection/maintenance, log books, etc.):**

## **SECTION V: EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES**

**ENSURE THAT THE FOLLOWING EMERGENCY RESPONSE EQUIPMENT ARE IN PLACE IN THE EVENT THAT SLUG PREVENTION PROCEDURES FAIL AND A SLUG DISCHARGE OCCURS (check all that apply)**

- ☐ **COMMUNICATION EQUIPMENT AND/OR ALARMS**
- ☐ **SPILL CONTAINMENT AND CONTROL EQUIPMENT**
- ☐ **SPILLED MATERIAL STORAGE CONTAINERS**
- ☐ **PROTECTIVE CLOTHING**
- ☐ **RESPIRATORS**
- ☐ **FIRST AID KITS**
- ☐ **VENTILATION EQUIPMENT**
- ☐ **DECONTAMINATION EQUIPMENT/CONTRACTED DECONTAMINATION FIRM**
- ☐ **OTHER:**

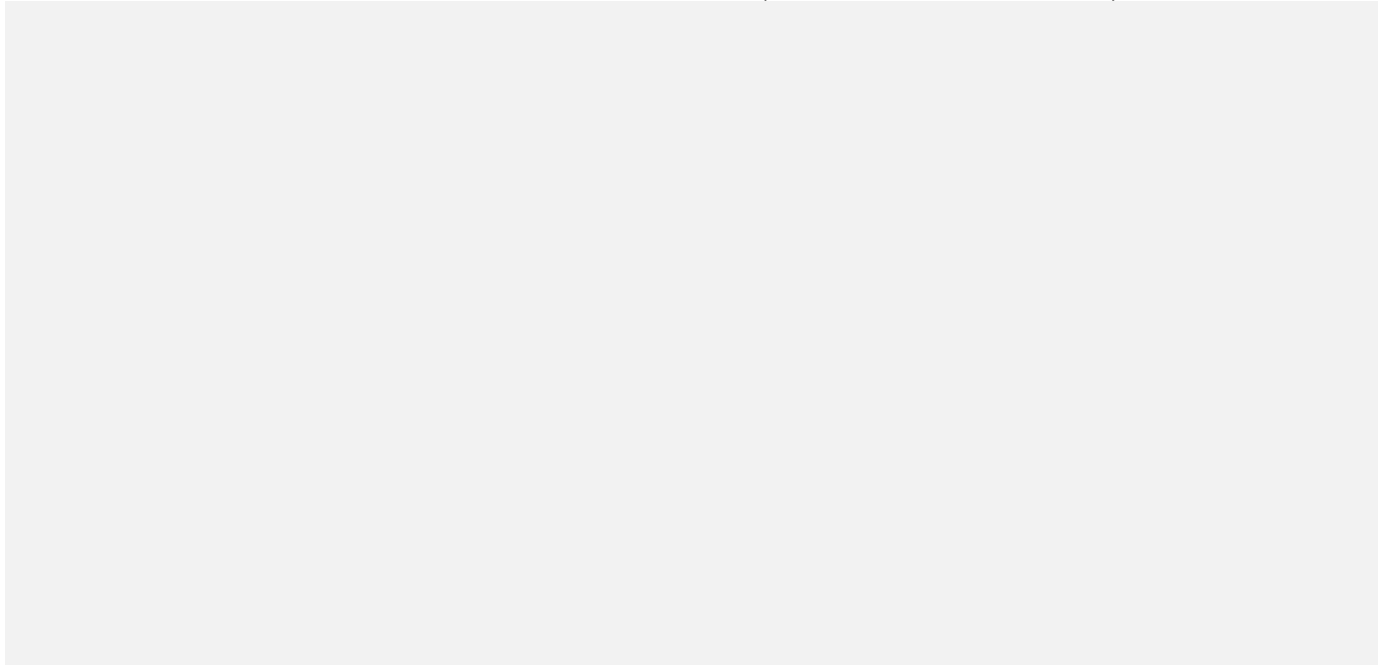
**PLEASE PROVIDE A BRIEF SYNOPSES OF THE APPLICABLE EMERGENCY RESPONSE EQUIPMENT INVENTORY (i.e., locations, quantity on hand, etc.):**



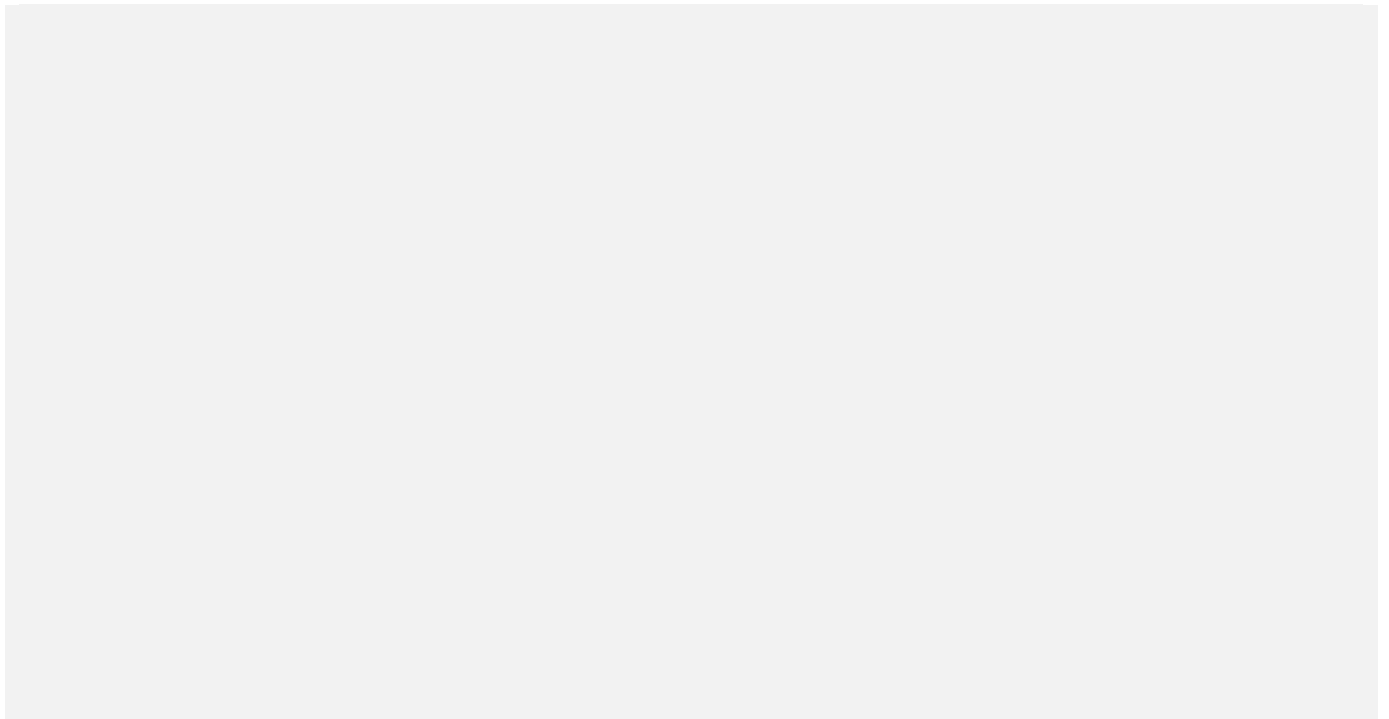
## **SECTION V: EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES (CONTINUED)**

**ENSURE THAT THE FOLLOWING EMERGENCY RESPONSE PROCEDURES ARE IN PLACE IN THE EVENT THAT SLUG PREVENTION PROCEDURES FAIL AND A SLUG DISCHARGE OCCURS**

**NOTIFICATION OF RESPONSIBLE PERSONNEL (CHAIN OF COMMAND):**

A large, empty rectangular box with a light gray background, intended for detailing the notification of responsible personnel (chain of command) in the event of a slug discharge.

**EVACUATION PROCEDURES:**

A large, empty rectangular box with a light gray background, intended for detailing the evacuation procedures in the event of a slug discharge.

## **SECTION V: EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES (CONTINUED)**

### **SAFETY AND FIRST AID PROCEDURES:**

### **NOTIFICATION OF OUTSIDE ASSISTANCE:**

## **SECTION V: EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES (CONTINUED)**

### **SPILL AND SLUG ASSESSMENT PROCEDURES:**

### **SPILL AND SLUG CLEAN-UP PROCEDURES:**

## **SECTION V: EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES (CONTINUED)**

### **DECONTAMINATION PROCEDURES:**

### **PROCEDURES FOR PREVENTING CONTACT BETWEEN INCOMPATIBLE MATERIALS:**

**SECTION V: EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES  
(CONTINUED)**

**PROCEDURES FOR DISPOSING OR TREATING SPILLED MATERIALS:**

**OTHER PROCEDURES:**

## **SECTION VI: SLUG REPORTING AND CONTROL PLAN MODIFICATION**

### **SLUG REPORTING:**

**RESPONSIBLE FACILITY PERSONNEL MUST IMMEDIATELY NOTIFY THE WARWICK SEWER AUTHORITY (401-468-4726) OF A SLUG DISCHARGE.**

**ADDITIONALLY A “SLUG DISCHARGE NOTIFICATION LOG SHEET” MUST BE FAXED (401-739-1414) TO THE WARWICK SEWER AUTHORITY WITHIN 24 HOURS OF THE INCIDENT.**

**INCLUDE ADDITIONAL REPORTING MEASURES HERE (i.e., other City, State or Regional Agencies/Departments Notified):**

## **SECTION VI: SLUG REPORTING AND CONTROL PLAN MODIFICATION (CONTINUED)**

### **SLUG CONTROL PLAN MODIFICATION PROCEDURES:**

**AT A MINIMUM, THE FACILITY'S SLUG DISCHARGE PREVENTION AND CONTROL PLAN WILL BE EVALUATED FOR MODIFICATION EVERY TWO YEARS. AN IMMEDIATE MODIFICATION TO THE PLAN WILL BE WARRANTED SHOULD ANY OF THE INFORMATION CONTAINED HEREIN CHANGE.**

### **ADDITIONAL COMMENTS:**

## **SECTION VII: TRAINING PROGRAM**

**PERSONNEL TRAINING (check which apply):**

- ☐ **INVOLVES ALL PERSONNEL**
- ☐ **LIMITED TO MANUFACTURING, TREATMENT AND CLEANUP PERSONNEL**

**FREQUENCY (check which apply):**

- ☐ **TRAIN NEW EMPLOYEES IMMEDIATELY**
- ☐ **PROVIDE REFRESHER COURSE ON INTERIM BASIS FOR EXISTING EMPLOYEES**

**TRAINING CONSISTS OF (check which apply):**

- ☐ **REVIEW OF THE CHEMICALS USED AT THE PLANT, THE LOCATIONS OF THE CHEMICALS USED IN THE FACILITY, THE HAZARDS POSED BY CHEMICAL USE AND THE PROPER PROCEDURES FOR CHEMICAL HANDLING AND DISPOSAL**
- ☐ **REVIEW OF LOCATIONS OF THE LIFT STATIONS, DRAINS, PUMPS, VALVES, TANKS, ETC. ASSOCIATED WITH PLANT CHEMICAL OPERATIONS AND PRETREATMENT**
- ☐ **REVIEW OF THE SLUG DISCHARGE PREVENTION AND CONTROL PLAN**

**ADDITIONAL TRAINING COMMENTS:**



## SECTION VIII: CERTIFICATIONS

**“I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED.**

**BASED ON MY INQUIRY OF THE PERSON OR PERSONS DIRECTLY RESPONSIBLE FOR MANAGING COMPLIANCE WITH THE SLUG CONTROL MEASURES IN THIS SLUG DISCHARGE PREVENTION AND CONTROL PLAN, I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION SUPPLIED HEREIN IS TRUE, ACCURATE AND COMPLETE AND THIS FACILITY IS IMPLEMENTING THE SLUG DISCHARGE PREVENTION AND CONTROL PLAN SUBMITTED TO THE WARWICK SEWER AUTHORITY.**

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**NAME/TITLE OF AUTHORIZED REPRESENTATIVE  
RESPONSIBLE FOR THE SLUG CONTROL PLAN**

**DATE**

**I CERTIFY UNDER PENALTY OF LAW THAT THE SLUG PREVENTION AND CONTROL EQUIPMENT INSTALLED BY THE INDUSTRY WILL PROVIDE ADEQUATE PROTECTION FROM SLUG LOADING WHEN USED AND MAINTAINED PROPERLY.**

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**NAME/TITLE OF PROFESSIONAL ENGINEER  
(OR OTHER) RESPONSIBLE FOR SLUG PREVENTION  
AND CONTROL EQUIPMENT**

**DATE**